

IN THE CLAIMS:

Please cancel claims 1, 3, 6, and 7, and amend claims 2, 4 and 5 as follows:

1. (Cancelled)

2. (Currently Amended) A motor-driven injection molding apparatus comprising:

a frame having an upper surface;

a mold comprising:

(a) a stationary mold;

(b) a movable mold having a lower portion disposed opposite the stationary mold;

and

(c) a cavity defined by the stationary mold and the movable mold when the stationary mold and movable mold are adjacent one another during a mold clamping state;

a center fixed plate supporting ~~[[a]]~~ the stationary mold ~~of metal mold;~~

a movable mold plate having a lower portion with two sides, and an upper edge having a projection extending therefrom, said movable mold plate disposed so as to support the movable mold, and movably arranged so as to enable the movable mold and movable mold plate to approach [[to]] and deviate from said center fixed plate ~~and supporting a movable mold of the metal molds;~~

one or more bearing units affixed to each side of the lower portion of the movable mold plate;

a slide guide disposed so as to receiving a receive the lower portion of the movable mold

plate, and slidably ~~guiding~~ guide said movable mold plate in ~~[[said]]~~ approaching and deviating directions from the stationary mold and the center fixed plate, said slide guide comprising:

(a) two linear rails disposed parallel to each other on the upper surface of the frame in a moving direction of the movable mold plate, each of said linear rails having an upper ball groove and a lower ball groove; and

(b) one or more bearing units comprised of a plurality of ball bearings and one or more ball bearing holders, each of said bearing units being affixed to each side of the lower portion of the movable mold plate and disposed adjacent to the linear rails so as to slide relative thereto, the plurality of ball bearings being movably disposed within the ball bearing holders so as to allow the ball bearings to roll along the upper ball grooves and the lower ball grooves of the linear rails;

two ball screws operable to ~~for opening and closing~~ open and close the mold, said ball screws disposed within the motor-driven injection molding apparatus so as to ~~extending in a cantilever state~~ extend from said center fixed plate toward said movable mold plate, and ~~engaging~~ engage with said movable mold plate at two points on opposing corners of the movable mold plate;

an electric side motor in movable connection with the two ball screws, operable so to ~~for opening and closing~~ open and close the mold, ~~said electric motor~~ by rotating said ball screws in a ~~cantilever state~~ in both ~~[[of]]~~forward and backward directions, ~~and approaching~~ thereby moving said movable mold plate ~~[[to]]~~ toward and away from said center fixed plate ~~and deviating said movable mold plate from said center fixed plate; and~~

a motor-driven injection molding mechanism having:

a plunger in flowable connection with the cavity defined by the movable mold and

the stationary mold, through an orifice disposed through the center fixed plate; and

an electric motor for injecting injection side motor in movable connection with the plunger, operable to move the plunger toward and away from the center fixed plate, the [[said]] electric injection side motor being arranged in an disposed opposite side to said movable mold plate with respect to said center fixed plate in such a manner as to oppose to a mold opening and closing mechanism having the structure mentioned above, and driving a operable to drive molten resin into the cavity said metal mold in a during the mold clamping state of said stationary mold and said movable mold by approaching said by forcing the plunger toward the cavity stationary mold plate and said movable mold plate;

wherein the projection on the movable mold plate is diagonally penetrated by one of the two ball screws.

3. (Cancelled)

4. (Currently Amended) [[A]] The motor-driven injection molding apparatus as claimed of claim [[1]] 2, wherein said injection molding apparatus mechanism includes further comprises:

an injection side movable plate arranged so as to freely approach to and deviate from said center fixed plate or another fixed plate, and disposed so as to support supporting a the plunger driving the molten resin into said metal mold;

a guide mechanism for guiding the injection side movable plate in said during approach approaching and deviating direction deviation therefrom from the mold; and

an injecting ball screw having a first end and a protruding end extending from said center fixed plate or the another fixed plate to a side of said injection side movable plate, in screwable connection with said injection side movable plate at the first end, and in drivable connection with the electric injection side motor at the protruding portion ~~and screwing with the injection side movable plate;~~ ~~[[and]]~~

~~an injecting~~ wherein the electric injection side motor ~~rotating~~ is operable to rotate said injecting ball screw in both forward and backward directions, so as to cause the injection side movable plate to approach and deviate ~~said injection side movable plate to and from~~ said center fixed plate ~~or the another fixed plate~~, thereby driving the molten resin into the cavity ~~said metal mold by~~ via said plunger.

5. (Currently Amended) ~~[[A]]~~ The motor-driven injection molding apparatus of as claimed in claim 4, wherein ~~said injecting ball screw extends from said center fixed plate or the another fixed plate to a side of said injection side movable plate so as to be screwed with the injection side movable plate,~~ the portion of the injection ball screw protruding from the injection side movable plate is supported by an ~~[[the]]~~ injection side fixed plate, ~~or is set in a cantilever state with no injection side fixed plate,~~ and the rotation driving force of said ~~injecting~~ electric injection side motor is transmitted to said protruding portion of the injection ball screw so as to rotate said injection ball screw.

6. (Cancelled)

7. (Cancelled)